

WHAT IS CLAIMED IS:

1. A printing system having an external apparatus
for generating printing data corresponding to an image
to be printed, and a printing apparatus for performing
5 printing with a printhead on the basis of the printing
data to be output from the external apparatus, wherein
the printing apparatus comprises:

storage means for storing head information about
the printhead; and

10 output means for outputting the head information,
and

the external apparatus comprises:

image processing means for processing the
printing data;

15 input means for inputting the head information;
and

setting means for setting a processing parameter
for processing by said image processing means on the
basis of the head information input by said input means.

20 2. The system according to claim 1, wherein the head
information contains discharge amount information for
each of a plurality of heads of the printhead and
identification information unique to the printhead.

3. The system according to claim 2, wherein said
25 setting means comprises management means for managing
the discharge amount information and the identification

information for the printhead in correspondence with each other, and

when identification information corresponding to the identification information contained in the head information input by said input means is not managed by said management means, said setting means sets a processing parameter of image processing for the printing data to be output to the printing apparatus.

4. The system according to claim 1, wherein said output means outputs the head information at the same timing as input of a printing start instruction from the external apparatus.

5. The system according to claim 1, wherein said output means outputs the head information at the same timing as exchange of the printhead.

6. The system according to claim 1, wherein said output means outputs the head information at a timing based on mounting/dismounting of the printhead.

7. The system according to claim 1, wherein the external apparatus and the printing apparatus are connected via a communication line, and said output means transmits the head information to the external apparatus via the communication line.

8. The system according to claim 1, wherein the external apparatus and the printing apparatus are connected via a communication line, and said input

means receives the head information from the printing apparatus via the communication line.

9. The system according to claim 1, wherein said output means outputs the head information to a printing
5 medium.

10. The system according to claim 1, wherein said input means includes a user interface displayed on a monitor.

11. The system according to claim 1, wherein the
10 printhead includes an inkjet printhead for discharging ink to perform printing.

12. The system according to claim 1, wherein the printhead includes a printhead for discharging ink using thermal energy, and comprises a thermal energy
15 transducer for generating thermal energy to be applied to the ink.

13. A printing apparatus for performing printing with a printhead on the basis of printing data input from an external apparatus, comprising:

20 storage means for storing head information about the printhead;

output means for outputting the head information;
and

input means for inputting printing data having
25 undergone image processing using a processing parameter based on the head information set by the external

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apparatus.

14. The apparatus according to claim 13, wherein the head information contains discharge amount information for each of a plurality of heads of the printhead and identification information unique to the printhead.

15. The apparatus according to claim 13, wherein said output means outputs the head information at the same timing as input of a printing start instruction from the external apparatus.

10 16. The apparatus according to claim 13, wherein said
output means outputs the head information at the same
timing as exchange of the printhead.

17. The apparatus according to claim 13, wherein said output means outputs the head information at a timing based on mounting/dismounting of the printhead.

18. The apparatus according to claim 13, wherein the printing apparatus is connected to the external apparatus via a communication line, and said output means transmits the head information to the external apparatus via the communication line.

19. The apparatus according to claim 13, wherein the printing apparatus is connected to the external apparatus via a communication line, and said input means receives the printing data from the external apparatus via the communication line.

20. The apparatus according to claim 13, wherein said

output means outputs the head information to a printing medium.

21. The apparatus according to claim 13, wherein the printhead includes an inkjet printhead for discharging
5 ink to perform printing.

22. The apparatus according to claim 13, wherein the printhead includes a printhead for discharging ink using thermal energy, and comprises a thermal energy transducer for generating thermal energy to be applied
10 to the ink.

23. An information processing apparatus for inputting printing data to a printing apparatus for performing printing with a printhead, comprising:

input means for inputting head information about
15 the printhead that is stored in the printing apparatus and output from the printing apparatus; and

setting means for setting a processing parameter of image processing for the printing data to be output to the printing apparatus on the basis of the head
20 information input by said input means.

24. The apparatus according to claim 23, wherein the head information contains discharge amount information for each of a plurality of heads of the printhead and identification information unique to the printhead.

25. The apparatus according to claim 24, wherein said setting means comprises management means for managing

the discharge amount information and the identification information for the printhead in correspondence with each other, and

when identification information corresponding to
5 the identification information contained in the head information input by said input means is not managed by said management means, said setting means sets the processing parameter of image processing for the printing data to be output to the printing apparatus.

10 26. The apparatus according to claim 23, wherein the printing apparatus outputs the head information at the same timing as input of a printing start instruction from the information processing apparatus.

27. The apparatus according to claim 23, wherein the
15 printing apparatus outputs the head information at a timing based on mounting/dismounting of the printhead.

28. The apparatus according to claim 23, wherein the printing apparatus outputs the head information at the same timing as exchange of the printhead.

20 29. The apparatus according to claim 23, wherein the information processing apparatus is connected to the printing apparatus via a communication line, and said input means receives the head information from the printing apparatus via the communication line.

25 30. The apparatus according to claim 23, wherein said input means includes a user interface displayed on a

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monitor.

31. A control method for a printing system having an external apparatus for generating printing data and a printing apparatus for performing printing with a printhead on the basis of the printing data, comprising:

the storage step of storing head information about the printhead in an internal memory of the printing apparatus;

the output step of outputting the head information from the printing apparatus;

the input step of inputting the head information to the external apparatus; and

the setting step of setting a processing parameter of image processing for the printing data to be output to the printing apparatus on the basis of the head information input in the input step.

32. The method according to claim 31, wherein the head information contains discharge amount information for each of a plurality of heads of the printhead and identification information unique to the printhead.

33. The method according to claim 32, wherein the setting step comprises the management step of managing the discharge amount information and the identification information for the printhead in correspondence with each other, and

the setting step comprises, when identification information corresponding to the identification information contained in the head information input in the input step is not managed in the management step,
5 setting the processing parameter of image processing for the printing data to be output to the printing apparatus.

34. The method according to claim 31, wherein the head information is output in the output step at the
10 same timing as input of a printing start instruction from the external apparatus.

35. The method according to claim 31, wherein the head information is output in the output step at the same timing as exchange of the printhead.

15 36. The method according to claim 35, wherein the output step comprises outputting the head information when the printhead is mounted/dismounted.

37. The method according to claim 31, wherein the external apparatus and the printing apparatus are
20 connected via a communication line, and

the output step comprises transmitting the head information to the external apparatus via the communication line.

38. The method according to claim 31, wherein the
25 external apparatus and the printing apparatus are connected via a communication line, and

the input step comprises receiving the head information from the printing apparatus via the communication line.

39. The method according to claim 31, wherein the
5 output step comprises outputting the head information
to a printing medium.

40. The method according to claim 31, wherein the input step comprises inputting the head information via a user interface displayed on a monitor.

10 41. The method according to claim 31, wherein the printhead includes an inkjet printhead for discharging ink to perform printing.

42. The method according to claim 31, wherein the printhead includes a printhead for discharging ink using thermal energy, and comprises a thermal energy transducer for generating thermal energy to be applied to the ink.

43. A control method for a printing apparatus for performing printing with a printhead on the basis of printing data input from an external apparatus, comprising:

the storage step of storing head information about the printhead in a memory;

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        the output step of outputting the head
25  information; and

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the input step of inputting printing data having

undergone image processing using a processing parameter based on the head information set by the external apparatus.

44. The method according to claim 43, wherein the
5 head information contains discharge amount information for each of a plurality of heads of the printhead and identification information unique to the printhead.

45. The method according to claim 43, wherein the
10 head information is output in the output step at the same timing as input of a printing start instruction from the external apparatus.

46. The method according to claim 43, wherein the head information is output in the output step at the same timing as exchange of the printhead.

47. The method according to claim 43, wherein the
15 printing apparatus is connected to the external apparatus via a communication line, and

the output step comprises transmitting the head information to the external apparatus via the
20 communication line.

48. The method according to claim 43, wherein the printing apparatus is connected to the external apparatus via a communication line, and

the input step comprises receiving the printing
25 data from the external apparatus via the communication line.

49. The method according to claim 43, wherein the output step comprises outputting the head information to a printing medium.

50. The method according to claim 43, wherein the
5 printhead includes an inkjet printhead for discharging ink to perform printing.

51. The method according to claim 43, wherein the printhead includes a printhead for discharging ink using thermal energy, and comprises a thermal energy
10 transducer for generating thermal energy to be applied to the ink.

52. A control method for an information processing apparatus for inputting printing data to a printing apparatus for performing printing with a printhead,
15 comprising:

the input step of inputting head information about the printhead that is stored in the printing apparatus and output from the printing apparatus; and

the setting step of setting a processing
20 parameter of image processing for the printing data to be output to the printing apparatus on the basis of the head information input in the input step.

53. The method according to claim 52, wherein the head information contains discharge amount information
25 for each of a plurality of heads of the printhead and identification information unique to the printhead.

54. The method according to claim 53, wherein the setting step comprises the management step of managing the discharge amount information and the identification information for the printhead in correspondence with each other, and

the setting step comprises, when identification information corresponding to the identification information contained in the head information input in the input step is not managed in the management step, setting the processing parameter of image processing for the printing data to be output to the printing apparatus.

55. The method according to claim 52, wherein the head information is output from the printing apparatus at the same timing as input of a printing start instruction by the information processing apparatus.

56. The method according to claim 55, wherein the head information is output from the printing apparatus at the same timing as mount/dismount of the printhead.

57. The method according to claim 52, wherein the head information is output from the printing apparatus at the same timing as exchange of the printhead.

58. The method according to claim 52, wherein the information processing apparatus is connected to the printing apparatus via a communication line, and

the input step comprises receiving the head

information from the printing apparatus via the communication line.

59. The method according to claim 52, wherein the input step uses a user interface displayed on a monitor.

5 60. A computer-readable memory storing program codes of control of a printing system having an external apparatus for generating printing data and a printing apparatus for performing printing with a printhead on the basis of the printing data, comprising:

10 a program code of the storage step of storing head information about the printhead in an internal memory of the printing apparatus;

a program code of the output step of outputting the head information from the printing apparatus;

15 a program code of the input step of inputting the head information to the external apparatus; and

a program code of the setting step of setting a processing parameter of image processing for the printing data to be output to the printing apparatus on the basis of the head information input in the input step.

20 61. A computer-readable memory storing program codes of control of a printing apparatus for performing printing with a printhead on the basis of printing data input from an external apparatus, comprising:

a program code of the storage step of storing

head information about the printhead in a memory;

a program code of the output step of outputting the head information; and

a program code of the input step of inputting
5 printing data having undergone image processing using a processing parameter based on the head information set by the external apparatus.

62. A computer-readable memory storing program codes of control of an information processing apparatus for
10 inputting printing data to a printing apparatus for performing printing with a printhead, comprising:

a program code of the input step of inputting head information about the printhead that is stored in the printing apparatus and output from the printing
15 apparatus; and

a program code of the setting step of setting a processing parameter of image processing for the printing data to be output to the printing apparatus on the basis of the head information input in the input
20 step.

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